

Amendments to the claims:

This listing of claims will replace all prior versions and listings of Claims in the Application:

Listing of Claims:

- 1 1-12 (canceled).
- 1 13. (Currently Amended) A method of determining a damage threshold for delivering an antiseptic dose to a pathogen ~~in~~ within a periodontal tissue, the method comprising:
 - 2 a. measuring a pulsed laser output from a laser source;
 - 3 b. irradiating a target with the pulsed laser output, wherein the target comprises the pathogen and a material that is different from the periodontal tissue;
 - 4 c. monitoring the pathogen for ablation within the material;
 - 5 d. adjusting the pulsed laser output;
 - 6 e. repeating steps (a) through (d) to determine an ablation threshold of the pathogen within the target; ~~and~~
 - 7 f. calculating ~~a therapeutic ratio~~ the antiseptic dose of laser radiation for treating the periodontal tissue comprising the pathogen based on a known response of periodontal tissue to the laser output and the ablation threshold of the pathogen within the target; ~~and~~
 - 8 g. irradiating the periodontal tissue with the antiseptic dose of laser radiation,
wherein the antiseptic dose eradicates the pathogen within the periodontal tissue
with a minimal damage to the periodontal tissue.
- 1 14. (Original) The method of claim 13, wherein adjusting the pulsed laser output comprises controlling a distance between a firing end of the laser source and a surface of the target.
- 1 15. (Original) The method of claim 13, wherein the pulsed laser output is delivered at a repetition rate corresponding to a photo-acoustic of the target.
- 1 16. (Canceled).

- 1 17. (Previously Presented) The method of claim 13, further comprising selecting a treatment
- 2 protocol for treating the periodontal tissue that hosts the pathogen based on the
- 3 therapeutic ratio.
- 1 18. (Original) The method of claim 13, wherein the pulsed laser output corresponds to a
- 2 wavelength in a range of 580 to 1800 nanometers.
- 1 19. (Original) The method of claim 13, wherein irradiating the target with the pulsed laser
- 2 output comprises exposing the target through an optical fiber.
- 1 20. (Previously Presented) The method of claim 13, wherein monitoring the pathogen for
- 2 ablation comprises scanning an exposed region of the target with an optical scanning
- 3 means.
- 1 21. (Canceled).
- 1 22. (Previously Presented) The method of claim 13, wherein monitoring the pathogen for
- 2 ablation comprises measuring sound using an audio detector.